

### **REMARKS**

This Amendment is in response to the final Office action (Paper No. 20100115) mailed on 26 January 2010. Reexamination and reconsideration are respectfully requested.

#### **Listing of The Claims**

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

#### **Status of The Claims**

Claims 1-36 are pending in this application.

#### **Amendment of The Claims**

Claim 19 is amended. Specifically, claim 19 is amended to delete “the selected one of the at least one aperture of the cap plate”, because there is no antecedence basis for the “at least one aperture of the cap plate”.

#### **Entry of Amendment After Final - 37 CFR §1.116(b)**

The foregoing amendments conform with 37 CFR §1.116(b) by deleting the language that does not have antecedence basis, and thereby presenting rejected claims in better form for consideration. No new issues are raised by this amendment because all claims have already been fully considered.

Entry of the amendments is thus respectfully requested.

**Issues Raised by Paper No. 20100115**

In the final Office action (Paper No. 20100115), the Examiner stated:

Claims 1, 7, 13, 19, 25 and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claims 1-6, 13-18 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (US 2003/0077484) in view of Azema et al. (JP2002-334685).

Claims 7, 9, 12, 19, 21, 24, 31, 33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (JP07-169506) in view of Aaltonen et al. (US 6,824,917).

Claims 8, 10, 11, 20, 22, 23, 32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (JP07-169506) and Aaltonen et al. (US 6,824,917), and further in view of Azema et al. (JP2002-334685).

**I. Claim Rejection - 35 U.S.C. §112**

Claims 1, 7, 13, 19, 25 and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

**(1) Claim limitation “Interference fit”**

Regarding claims 1, 7, 13, 19, 25 and 31, on page 2 of Paper No. 20100115, the Examiner stated:

“The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims recite “by an interference fit” which had

not been described within the specification. Although Applicant states in the remarks submitted 23 October 2009 this is the equivalent to the term press fit it is not mentioned within the specification.”

Applicant respectfully disagrees with the Examiner because the term “interference fit” is an art recognized term which is essentially synonymous with “press fit” as disclosed in Applicant’s original specification.

Specifically, both of the phrases “interference fit” and “press fit” are art recognized terms. As defined in Wikipedia ([http://en.wikipedia.org/wiki/Interference\\_fit](http://en.wikipedia.org/wiki/Interference_fit)), and as mentioned on page 232 of *PRINCIPLES AND DESIGN OF MECHANICAL FACE SEALS* by Alan O. Lebeck, an interference fit, is also known as a press fit or friction fit, and is defined as a fastening between two parts which is achieved by friction after the parts are pushed together, rather than by any other means of fastening. More specifically, as defined in *MANUFACTURING PROCESSES, BASIC FOR FITS* ([http://hughjack.com/notes\\_manufact/assemblya3.html#141972](http://hughjack.com/notes_manufact/assemblya3.html#141972)), interference fits are used mainly for press fits where the two parts are pushed together, and require no other fasteners.

A search of U.S. Patents and Application Publications reveals more than 3,000 U.S. Patents or Application Publications that use “interference fit” and “press fit” equivalently, including:

- U.S. Patent No. **6,889,803**, entitled *TORSIONAL ACTIVE VIBRATION CONTROL SYSTEM*, issued on May 10, 2005;
- U.S. Patent No. **6,887,278**, entitled *PROSTHETIC IMPLANT HAVING*

*SEGMENTED FLEXIBLE STEM*, issued on May 3, 2005;

- U.S. Patent No. **6,887,276**, entitled *MODULAR IMPLANT FOR JOINT RECONSTRUCTION AND METHOD OF USE*, issued on May 3, 2005;
- U.S. Patent No. **6,854,608**, entitled *TURNTABLE*, issued on February 15, 2005;
- U.S. Patent No. **6,851,492**, entitled *FASTENER, HAMMERING JIG FOR INSTALLING THE FASTENER, AND DRILL BIT FOR WORKING UNDERCUT HOLE*, issued on February 8, 2005;
- U.S. Patent No. **6,056,399**, entitled *INTERCHANGEABLE NOSEPIECE SYSTEM*, issued on May 2, 2000;
- U.S. Patent No. **6,017,347**, entitled *WIRE CLAMP ASSEMBLY*, issued on January 25, 2000; and
- U.S. Patent No. **6,015,399**, entitled *OSTOMY PATIENT EQUIPMENT*, issued on January 18, 2000.

For example, in U.S. Patent No. 6,889,803, it is explicitly stated that **the interference fit is press fit**.

Therefore, Applicant's respectfully submits that claims 1, 7, 13, 19, 25 and 31's "interference fit" conforms with the "press fit" in Applicant's original specification.

## **(2) Claim limitation "adhesive"**

Regarding claims 1, 7, 13, 19, 25 and 31, on page 2 of Paper No. 20100115, the

Examiner stated:

“Furthermore, Applicant has amended the claims to include “or an adhesive” The specification is silent on the subject matter of an adhesive.”

Applicant respectfully disagrees with the Examiner because as clearly disclosed by Applicant's original specification, the lead plate is coupled to the cap plate by simple pressing, and by definition, “press fit” or “interference fit” precludes the use of “an adhesive”.

Specifically, as defined in *MANUFACTURING PROCESSES, BASIC FOR FITS* ([http://hughjack.com/notes\\_manufact/assemblya3.html#141972](http://hughjack.com/notes_manufact/assemblya3.html#141972)), **interference fits** always overlap and are used mainly for **press fits** where the two parts are pushed together, and **require no other fasteners**.

Therefore, Applicant's original disclosure “*the lead plate 131 can be coupled to the cap plate 131 by simple pressing*” in paragraph [0038] precludes the usage of other fasteners, including adhesive, for coupling the lead plate to the cap plate.

Consequently, Applicant's respectfully submits that the claim language “*without welding or an adhesive*” of claim 1 conforms with Applicant's original specification.

## **II. Claim Rejections - 35 U.S.C. §103**

**II-1. Claims 1- 6, 13-18, 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (US 2003/0077484 A1) in view of Azema (JP2002-334685).**

Applicant respectfully traverses this rejection because (1) Cho ‘484 was **not** applied

by “another”, (2) Cho '484 was published **after** the foreign priority date of the present application, and (3) the present application and Cho '484 were, at the time the present invention was made, were owned by the **same** Company Samsung SDI.

Specifically, the inventor for Cho '484 is **Sung-Jae Cho**, while the inventor for the present application is also **Sung-Jae Cho**. Therefore, Cho '484 was a patent publication of Applicant's own invention.

In addition, Cho '484 was published on April 24, 2003, which is later than the foreign priority date of the present application, which is December 26, 2002.

Therefore, Cho '484 is not applicable as a prior art under any subsection of 35 U.S.C. §103.

Moreover, according to 35 U.S.C. §103(c)(1):

“Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.”

Therefore, Cho '484 is not qualified as prior for purposes of obviousness under 35 U.S.C. 103, in view of 35 U.S.C. §103(c)(1) and 37 C.F.R. (C)(4).

Consequently, this rejection of claims 1- 6, 13-18, 25-30 is moot.

**II-2. Claims 7, 9, 12, 19, 21, 24, 31, 33 and 36 rejected under 35 U.S.c. 103(a) as being unpatentable over Yamashita (JP 07-169506) in view of Aaltonen et al (US 6,824,917).**

Applicant respectfully traverses this rejection because Yamashita '506 and Aaltonen '917 fails to teach or suggest claims 7, 19 and 31's *“lead plate is pressfit into the at least one cavity of the can, the lead plate being tightly attached by an interference fit without welding or an adhesive to the at least one cavity of the can and being connected to a safety device”*.

Regarding claims 7, 9, 12, 19, 21, 24, 31, 33 and 36, the Examiner identified Yamashita '506's cavity 2a as the pending claims' "cavity", and identified Yamashita '506's lead tabs 4a and 4b as the pending claims' "lead plate". The Examiner asserted that:

“Yamashita teaches a lead plate (4a or 4b) to be pressed into the cavity (2a) of the can (2) and that the lead plate (4a or 4b) is connected to a safety device (3 in Figure 1, as applied to claims 7 and 19). Yamashita et al. discloses the using resin (5) to attach the lead into the cavity thus does not use welding.”

The Examiner also identified Aaltonen '917's recess cheek portion 120 as the pending claims' "cavity", and asserted that:

“Aaltonen et al. discloses a battery system and teaches a recessed portion (120) having the substantially a size and shape to nest the body 130 of safety component (26) in the recessed portion and does not teach welding these pieces together (col. 4lines 36-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to make the recess portion of Yamashita substantially the size and shape of the lead in order to nest the components together as is taught by Aaltonen thereby preventing the additional step of using resin to attach.”

Applicant respectfully disagrees with the Examiner because none of Yamashita '506 and

Aaltonen '917 teaches or suggests press fitting a lead plate into a cavity of a can without welding or an adhesive.

Specifically, Yamashita '506 explicitly teaches that lead tab 4a (identified by the Examiner as the pending claims' "lead plate") is fixed to cavity 2a (identified by the Examiner as the pending claims' "cavity") by **laser welding**,<sup>1</sup> rather than by resin, or press fitting.

Although Yamashita '506 teaches that PTC component 3 is covered with synthetic resin 5, Yamashita '506 does not suggest that the lead tab is fixed to cavity by resin.

Therefore, the Examiner's assertion that "*Yamashita et al. discloses the using resin (5) to attach the lead into the cavity thus does not use welding*" is not correct.

In addition, Aaltonen '917 merely teaches that insulation plate 14 includes a recess cheek portion 120 for receiving body 130 of safety component 26. Aaltonen '917 does not teach or suggest that the lead ends of the safety component 26 are also received in the recess cheek portion 120.

Moreover, although Aaltonen '917 does not teach welding safety component 26 to insulation plate 14, Aaltonen '917 teaches **welding** the lead end of the safety component 26

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<sup>1</sup> Paragraph [0018] of the English translated Yamashita '506 reads: "PTC element 3 carries out covering formation of the lead tabs 4a and 4b which become both sides from a nickel board etc., and **one lead tab 4a** extends on both sides of PTC element 3, and it is fixing the extended part of these both **to the crevice 2a** of exterior container 2 pars basilaris ossis occipitalis **by laser welding** etc. And PTC element 3 except the lead tab 4b of another side in the crevice 2a is covered with the synthetic resin 5 which has insulation. ... ."



with a rivet 60 for holding the insulation plates 14 and safety component 26 together.<sup>2</sup>

Therefore, Aaltonen '917 does not teach or suggest press fitting the lead end of the safety component 26 to recess cheek portion 120.

In summary, because none of Yamashita '506 and Aaltonen '917 teaches or suggests press fitting a lead plate into a cavity of a can without welding or an adhesive, the combination of Yamashita '506 and Aaltonen '917 fails to teach or suggest claims 7, 19 and 31's "*lead plate is pressfit into the at least one cavity of the can, the lead plate being tightly attached by an interference fit without welding or an adhesive to the at least one cavity of the can and being connected to a safety device*".

Consequently, claims 7, 19 and 31, and the dependent claims thereof, are patentably distinguishable over the prior art.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

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<sup>2</sup> Aaltonen '917's col. 5, lines 22-25 read: "The assembly of the insulation plates 14 and 44, cap 50 and safety component 26 is held together by together a rivet 60 having a head 61 and body 67. The lead end of the safety component and rivet could also be welded together, ... ."

No fee is incurred by this Amendment.

Respectfully submitted,

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